

(12) United States Patent

Yang

(10) **Patent No.:**

US 9,410,571 B2

(45) **Date of Patent:** Aug. 9, 2016

(54) VACUUM TRIPLE-STRUCTURE SUCTION

(71) Applicant: JSM CO., LTD., Chungcheongbuk-do

Kyeung Tae Yang, Chungcheongbuk-do (72)Inventor:

(KR)

Assignee: JSM CO., LTD., Chungcheongbuk-do (73)

(KR)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

(21) Appl. No.: 14/787,761

(22) PCT Filed: Oct. 1, 2014

(86) PCT No.: PCT/KR2014/009263

§ 371 (c)(1),

(2) Date: Oct. 28, 2015

(87) PCT Pub. No.: WO2015/199284

PCT Pub. Date: Dec. 30, 2015

(65)**Prior Publication Data**

US 2016/0169268 A1 Jun. 16, 2016

(30)Foreign Application Priority Data

Jun. 26, 2014 (KR) 10-2014-0078884

(51) **Int. Cl.**

A47G 1/17 (2006.01)A47G 29/00 (2006.01)F16B 47/00 (2006.01)

(52) U.S. Cl. CPC F16B 47/00 (2013.01)

(58) Field of Classification Search

CPC F16B 47/00 See application file for complete search history.

(56)**References Cited**

U.S. PATENT DOCUMENTS

2009/0189033	A1*	7/2009	Lin	F16B47/00
				248/205.5
2010/0012800	Al*	1/2010	Chen	
2010/0252700	A 1 *	10/2010	Wang	248/205.4 E16B 47/00
2010/0232700	AI	10/2010	wang	248/206.2

FOREIGN PATENT DOCUMENTS

CN	203067512	U	7/2013
JP	2011-094715	Α	5/2011
KR	20-1995-0008474	Y1	10/1995
KR	20-0318414	Y1	6/2003
KR	20-0392839	Y1	8/2005
KR	20-2008-0000699	Y1	4/2008
KR	10-2013-0099399	Α	9/2013

^{*} cited by examiner

Primary Examiner — Amy Sterling (74) Attorney, Agent, or Firm — Rabin & Berdo, P.C.

(57)**ABSTRACT**

The present invention relates to a vacuum triple-structure suction plate, and more particularly, to a vacuum triple-structure suction plate that is detachably attached to the walls in a bathroom or a kitchen by vacuum pressure and has a suction plate 110 recessed downward so that when the suction plate 110 is pulled up to be sucked by vacuum, the bottom is brought in close contact with a surface from the middle portion into a vacuum state and is then completely brought in close contact with the surface by stress in the body 300.

2 Claims, 6 Drawing Sheets

